

**Department of Environmental Protection
Montgomery County, Maryland**

DIVISION OF SOLID WASTE SERVICES



Montgomery County Resource Recovery Facility (RRF) retrofit reduces nitrogen oxide (NO_x) emissions by 50% and switches to a non-hazardous reagent (aqueous ammonia). (Story on page 10).

***MONTHLY REPORT
OCTOBER 2009***



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OVERVIEW

Tonnage at a Glance

The following table shows key material flows during the current month, fiscal year to date (FY Total), and the current calendar month in the two prior fiscal years. (County Fiscal Year 2010 began July 1, 2009.)

FACILITY	Oct FY10	FY10 Total	Oct FY09	Oct FY08
Materials Recovery Facility ⁽¹⁾	6,627 tons	26,005 tons	7,207 tons	8,043 tons
Brunswick Landfill Facility ⁽²⁾	17,626 tons	63,220 tons	21,595 tons	26,567 tons
Resource Recovery Facility ⁽³⁾	47,825 tons	184,897 tons	45,424 tons	52,960 tons
Yard Trim Compost Facility	4,266 tons	13,584 tons	3,484 tons	3,123 tons

(1) MRF tons reported as outgoing.

(2) Refers to waste sent to the landfill for disposal (ash residue and nonprocessible waste). It does not include rubble and bulk natural wood waste that is recycled.

(3) RRF tonnage refers to tons burned (processed). Waste shipped from the Transfer Station but not burned is in the pit and is not included in the tonnage presented here. These tonnages are preliminary, with adjustments made in the September and December monthly reports.

Revenue Analysis and Systems Evaluation

During October, program staff:

- Researched properties and entered billing changes into the database;
- Continued work on the Equity Enhancement Study for Task Order #25 and met with contractors to discuss the study;
- Prepared monthly house counts for collection contractors;
- Processed vacancy refunds payable in October;
- Updated Access™ databases and Excel™ spreadsheets for monthly Refuse and Recycling Collection contractor reports;
- Continued routine research and correction of solid waste fee abnormalities as they emerge in the property tax database;
- Generated Hauler/Collector Credit Account invoices for October 2009 totaling \$1,202,694.26 (a decrease of \$92,763.11 below October 2008);
- Updated the Aging Report (30-day arrearage was \$1,029.13 as of November 10, 2009);
- Reconciled October 2009 tons to monies posted in FAMIS, as well as to the total dollars charged in Paradigm;
- Continued to update and verify information in the Division of Solid Waste Services' (DSWS) Fixed Asset Database;
- Prepare data for the County Stat presentation;
- Assist with ongoing DSWS IT services, ERP and MC311 implementation; and
- Prepare the FY11 budget process.

CITIZEN COMMITTEES

Dickerson Area Facilities Implementation Group (DAFIG) – The next meeting will be held on Tuesday, December 8, 2009, at the Gothic Barn in Dickerson.

Solid Waste Advisory Committee (SWAC) – SWAC held its regular monthly meeting on Tuesday, October 6, 2009 at the Executive Office Building in the Lobby Level Auditorium. Thirteen SWAC and five County staff members were in attendance. Program Managers Lauren Kuhn and Gabie Monzon-Reynolds made presentations on Multi-family Recycling and Business Recycling respectively. The next meeting will be held on Tuesday, November 3, 2009.

COLLECTIONS

Resident Missed Collection Complaints:

October 2009	71
October 2008	99
Difference	-28

Call Center:

Calls received	6,625
E-mails received	1,531
Voicemails received	49
Bulk trash requests	1,615
Scrap metal requests	1,623
Blue bin requests	1,367
Blue cart requests	512

Public Outreach:

- Survey Cards:

The Public Service Workers distributed 1,661 survey cards in October and received 4.4% of the cards back.

	Excellent	Good	Average	Fair	Poor
Recycling Programs	85%	14%	1%	0%	0%
County Staff	81%	15%	0%	3%	1%
Recycling Crews	60%	29%	7%	3%	1%

The Call Center mailed out 188 survey cards in October and received 12.2% of the cards back.

	Excellent	Good	Average	Fair	Poor
Recycling Programs	96%	0%	0%	0%	4%
County Staff	87%	9%	0%	0%	4%
Recycling Crews	68%	14%	9%	5%	4%

- Website Survey:

For the month of October, 7 residents responded to our website survey. The following chart details residents' satisfaction with our recycling programs, county staff, and collection crews:

	Excellent	Good	Average	Fair	Poor
Recycling Programs	71%	0%	0%	29%	0%
County Staff	34%	33%	33%	0%	0%
Recycling Crews	72%	14%	0%	0%	14%

Collection Section Enforcement Actions:

- Citations: Two citations were issued in the month of October.
 - 48-20(a) – collected and/or transported solid waste within the county without a valid collector's tag attached to the vehicle. Issued to Clean Sweep Refuse at the Transfer Station.
 - 48-11 – deposited solid waste into a solid waste storage container of another without written consent. Issued to a resident illegally dumping used motor oil at the Damascus Shopping Center.
- Notices of Violation: No Notices of Violation were issued in the month of October 2009.

Web Site:

The following is information gathered from the Montgomery County Solid Waste web in October 2009:

Solid Waste Services Website	
Unique Visitors	37,734
Page Loads	113,204

Email List Memberships

Topic	Members	New subscribers this month
Holiday Reminder	13,279	53
HHW Announcements	4,297	88
Newsletter Helper	2,224	60
Facility Updates	1,631	60
Electronics Recycling	1,533	83
GoGreen	619	60
Total Subscriptions	23,583	404

Live Chats

Live chats	45
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Most Popular Web Pages

1. How do I...
2. Transfer Station
3. "Talkin' Trash" blog entry on recycling program expansion
4. Bulk trash
5. Holidays
6. Recycling Center
7. Household Hazardous Waste
8. Plastics Recycling
9. Curbside Recycling Program
10. Scrap Metal Recycling

WASTE MINIMIZATION

Product Recycled	Approximate weight recycled in October 2009 (tons)
Computers	12 tons
TVs	141 tons
Propane Tanks	2 tons
Textiles	0 ton
Construction Materials (Don't Dump – Donate)	4 tons
Vehicle Batteries	17 tons
Rechargeable Batteries	0 ton

HAZARDOUS WASTE PROGRAMS

Household Hazardous Waste (HHW) Collection – 4,575 patrons dropped off household hazardous wastes, and contractor personnel solidified 60 cubic yards of paint this month.

Small Quantity Generator/ECOWISE Program – There were 22 ECOWISE participants this month.

WASTE REDUCTION

Bicycle Recycling – “Bikes for the World” removed 4 tons of bikes this month for restoration and shipment to countries worldwide.

Paint Reduction – There were 22 patrons that received free paint. They took away 975 gallons, and we solidified 66 cubic yards of paint. We shipped 49.84 tons, or 64 cubic yards of paint to Honduras this month. FYTD we have shipped 80 tons of paint to Honduras.

NEW ‘GOGREEN’ Website – The new *GoGreen* website, (www.montgomerycountymd.gov/GOGREEN) will be a one stop site for a wide range of environmental programs and information for residents and businesses. A spike in hits to the site coincided with the GoGreen advertisements placed in the Gazette and on 94.7 Fresh FM. This month the site had 291 page views and 208 unique page views.

Straight Vegetable Oil (SVO) Recycling – The Transfer Station has a vendor that accepts Waste Vegetable Oil (WVO) for the sole purpose of bio-diesel production; this month 1.1 tons of SVO was shipped out for processing into biodiesel (<http://www.montgomerycountymd.gov/veggieoil>).

AIR PERMITS AND ENVIRONMENTAL PROGRAMS

Resource Recovery Facility (RRF): CEMS Tracking of RRF Emissions – The CEMS reported no instances of stack gas emissions exceeding permitted concentration limits during the month of October.

TES Contract (Weather Station) – All of the instrumentation worked normally in October. Data recovery for all parameters was 100 percent for the month. The total rainfall for the month was 5.84 inches.

WASTE REDUCTION AND RECYCLING

Public Education and Outreach – DSWS coordinated a Community Service Day event on October 24 to rejuvenate the recycling program at three multi-family properties owned and managed by the Housing Opportunities Commission (HOC). Approximately 30 residents of the three properties brought 520 pounds of confidential paper for shredding and recycling and donated 17 bags of clothing and numerous other items including chairs, fans, air conditioner units, baby seats, pots and pans that will be provided to families in need. In addition, DSWS staff and five recycling program volunteers relabeled on-site recycling containers and collection areas and provided recycling bins and educational materials to the residents. To further educate residents about the County's recycling program, staff gave presentations to the Gaithersburg Lions Club and to participants at the Bethesda Green Open House. DSWS is currently planning activities to celebrate America Recycles Day in November. A series of paper shredding/recycling and clothing and household good donation collection events will be held at four locations during the weekend of November 14 and 15. Residents will have the opportunity to shred confidential papers for recycling and donate clothing and household goods in usable and working condition at the following locations: Eastern Montgomery and Upcounty Regional Services Centers, John F. Kennedy High School in Silver Spring and Walt Whitman High School in Bethesda. Work has begun on the fall issue of the Civic Loop newsletter and will be sent to all community and civic associations in November.

On-Site Composting and Waste Reduction Activities – In October, a total of 1,092 compost bins were distributed to encourage residents to compost their leaves and grass clippings on-site. Staff conducted two composting workshops/presentations in October with 418 residents participating. In addition, one recycling program volunteer provided a hands-on demonstration to 2 residents on mulching and composting leaves. Staff also created an educational self-mailer highlighting proper composting methods that was sent to all single-family households during the last week in October and first week in November. In addition, work continues on producing a "how-to" video and DVD on backyard composting. This brief training video will be used during DSWS-sponsored composting trainings and workshops, as well as distributed to community and civic organizations, libraries, and recycling program volunteers to conduct their own composting workshops.

Recycling Investigations Unit – Since the unit was established, 24,862 site visits and 2,944 formal investigations have been conducted. In October, 38 NOV's were issued to businesses and multi-family properties for infringements against the recycling regulations and Chapter 48. One citation was issued to a business for not recycling required materials.

Commercial Recycling and Waste Reduction – The SORRT Program conducted 912 on-site visits of businesses in October and delivered 416 recycling bins. Staff resolved four complaints, participated in 13 events reaching 611 people and responded to 40

requests for information ranging from educational materials to presentations for property managers, tenants, and employees. The SORRT team has started evaluating the recycling infrastructure at all 203 Montgomery County Public Schools (MCPS) and facilities for the 2009-2010 school year. School evaluations are expected to be completed by December 15th. The first issue of the SORRT Network Newsletter will be mailed in mid-November and work is currently underway for other FY10 task orders including two business recycling seminars and Recycling Awareness Week activities.

Multi-Family Recycling and Waste Reduction – The TRRAC Program conducted 356 on-site visits to multi-family properties in October to monitor the status and progress of their recycling programs. Staff participated in 13 multi-family property educational events that reached 439 people. Staff also responded to 55 requests for information, resolved four resident concerns and distributed 762 multi-family recycling bins. The TRRAC team began developing action plans and meeting with twenty multi-family properties designated as a priority to achieve increased recycling achievement in FY10. Planning is underway for a seminar that will be held on November 19 at the Bethesda Marriott to educate multi-family property representatives, residents, and collectors on how to establish and maintain an effective recycling program in compliance with the County recycling regulations. The November issue of the TRRAC newsletter for property representatives was developed, and will be mailed in early November. Work began on the Spanish translation and update to the video that educates multi-family residents on recycling, waste reduction, and buying products with recycled content.

Mixed Paper Recycling – Existing educational materials were distributed to residents at several events. Larger quantities of materials were also provided to homeowner associations and civic groups for their use and distribution.

Volunteer Activities – Twenty-seven volunteers contributed nearly 97 hours of their time to support recycling activities in October. One volunteer recycling block captain provided a one half-hour demonstration to two neighbors on mulching and composting in Rockville; 21 volunteers contributed more than 76 hours of time at eight outreach events, and five volunteers contributed almost 20 hours of office assistance. The Recycling Volunteer Program recruited three new volunteers and 11 prospective volunteers in October. Copies of the Recycleletter were mailed to 255 active volunteers and 1,200 copies were distributed to the libraries. In addition, the program reached 292 potential volunteers during two volunteer outreach events at Sherwood and Gaithersburg High Schools.

PILOT PROGRAMS

Cooperative Collection/Alternative Collection – The SORRT Program continues to monitor all three Cooperative Collection Projects in Silver Spring to ensure that the participants are recycling properly. No major issues occurred in October.

FACILITY ACTIVITIES

Resource Recovery Facility (RRF) – The RRF processed a total of 47,825 tons, or 1,543 tons per day. Trash deliveries averaged 10,044 tons per week. On October 2, Unit #3 was removed from service to repair an economizer inlet tube. In addition an internal tube at the second pass division wall was repaired prior to putting the unit back in service. On October 12, the turbine was down twice due to an RTD (Resistive Temperature Detector) input board problem that caused the unit to trip. Programming changes were made to prevent future trips. The RTD was not in service at the time. On October 18, Unit #2 was taken out of service to repair the grate system. On October 31, Unit #1 came down for its scheduled fall outage. Due to operations at the adjacent Mirant facility on October 23, their discharge canal ran dry leaving the RRF without cooling water for a short time. This was accommodated by reducing load and using onsite stored water. During the month the SNCR was converted from anhydrous ammonia to aqueous ammonia.

There was no OSHA recordable incident this month.

There was no generation emergencies issued by PJM during this month. We purchased 21.5 MWh of power during the month.

The following environmental activities occurred:

- Submitted the September 2009 Water Supply Monthly Operating Report to MDE.
- Lead and copper re-sampling was conducted on the potable water supply using different location per MDE direction. Results do not exceed applicable levels and were sent to MDE.
- Submitted reports to MDE on 10/20 and 10/22 spill and cleanup.
- Annual stack testing continued through October 8.
- On October 10, Zoe Goodson for MDE Drinking Water Department conducted her annual inspection of the potable water system. There were no items noted.
- The 3rd quarter 2009 discharge monitoring report was sent to MDE.
- The 4th quarter 2009 bacteriological monitoring report was submitted to MDE.
- The 3rd quarter 2009 operations and emissions report was submitted to MDE.

Update on RRF's New NOx Emissions Control (Cover Story) – Montgomery County's new retrofit now reduces nitrogen oxide (NOx) emission by 50 percent. The new technology called LNTM (for "Low NOx") was developed by Covanta Energy, Inc. and enables existing energy-from-waste facilities to cut NOx emissions well below their already low levels by means of advanced combustion controls that actually limit the amount of NOx that is created during combustion and then works with ammonia to further reduce the facility's NOx emissions, ultimately by about fifty percent. Montgomery County's is the first publicly-owned energy-from-waste facility to deploy this new system. Final testing in October at our facility, the new LNTM combustion control methods alone were shown to be

able to reduce emissions to permitted levels without the use of the facility's selective non-catalytic-reduction (SNCR) system. (SNCR is the part of the facility's air pollution control system that uses ammonia to react with and thereby reduce stack emissions of NOx.) It was further shown that LN™ in combination with facility's existing SNCR system was cutting NOx emissions in half—the equivalent of removing about 70,000 cars from the road. This is an unusual level of achievement for what a local government can to help achieve the air quality goals for our region.

During October, the facility's SCNR system was then converted from hazardous anhydrous ammonia to non-hazardous aqueous ammonia. This was the second step in the two-part major air pollution control retrofit that was authorized under the County's Capital Improvement Program last year. Conversion to non-hazardous aqueous ammonia has eliminated the need for on site storage of anhydrous ammonia. While the use of anhydrous ammonia had posed minimal risk to the public, the presence of the storage tank needed had represented a source of potential concern for the community—a source now eliminated.

Materials Recovery Facility (MRF) – Approximately 1,703 tons of commingled materials were shipped out and approximately 4,924 tons of mixed paper were loaded out and transferred to the Office Paper Systems, Inc. processing facility this month. We replaced worn sections of asphalt at the scale house with concrete; installed cages for stationary ladders in the maintenance area and a stationary ladder from the mezzanine to the roof; replaced worn concrete sections on the tipping floor; installed a new 'Welcome' sign in the lobby; replaced plastic curtains on all the chutes leading to the glass storage bunkers; and replaced the head and tail pulleys on the light sort conveyor.

Oaks Landfill – The new 2.4 MW landfill gas-to-energy plant continues to operate well. SCS continues to complete Punch List items.

Gude Landfill – The new 0.8 MW landfill gas-to-energy plant continues to operate well. SCS continues to complete Punch List items.

The Yard Trim Processing Facility Project and all related activities have been placed on hold until it can be potentially incorporated into the Gude Landfill Remediation Plan.

The Gude Landfill Remediation project has been initiated (June 2009). Consultant work activities regarding Phase 0 – Aerial Mapping, Field Survey, and Limits of Waste Delineation are on-going. The technical proposal for Phase 1 – Nature and Extent Study has been approved. Review and interpretation of historical groundwater data and additional data needs has been initiated. Meetings with the Community and DEP/DSWS regarding the Gude Landfill Remediation will continue on a monthly basis.

Solid Waste Transfer Station – Covanta shipped 45,583 tons of processible waste via rail from the Transfer Station to the RRF; 2,318 tons less than shipped in October 2008.

The inbound radiation detectors had 14 alarms – 4 alarms involved a driver or passenger who had undergone recent medical tests and/or treatment involving radioactive isotopes and residual radiation; and 9 alarms by vehicles that were identified as containing low levels of medical isotopes with short half-lives in trash. There was 1 false alarm.

The Public Unloading Facility radiation detectors had 8 alarms. All alarms involved drivers or passengers who had undergone recent medical tests and/or treatment involving radioactive isotopes and residual radiation.

Transfer Station Enforcement – Under Chapter 48 of the Montgomery County Code, a total of **23** enforcement actions were taken during the reporting period. The enforcement composition breakdown includes: **0** citations, **0** NOVs, and **0** verbal warnings issued for lacking the permit required to collect or dispose of solid waste; **0** citations, **0** NOVs, and **2** verbal warnings were issued for delivering of solid waste acceptable for recycling to a solid waste facility; **0** citations, **8** NOVs, and **2** verbal warnings were issued for unlicensed collection companies; **4** citations and **5** NOVs were issued for operating an unlicensed trash truck of an unlicensed company; and **0** citations, **2** NOVs, and **0** verbal warnings were issued for operating a collection vehicle without a tight-fitting cover.

Site 2 Landfill Properties – Design work continues on the Site 2 ponds. Staff continues to address deer management issues. DGS Leasing group is waiting for a plan from Mr. Harney to address items before a new lease is issued for the Chiswell property.

Yard Trim Compost Facility – The facility received 4,266 tons of material for composting; this compares with 3,484 tons of material received during the same period last year. No material was diverted to back-up composting facilities. There were 8,410 cubic yards of bulk LeafGro™ shipped this month; compared with 5,989 cubic yards for the same period last year. There was no cubic yards of Linden Farm Humus sold; this compares with 20 cubic yards for the same period last year.

Bagging Operation – 18,350 bags of LeafGro™ were shipped to distributors. This compares with 20,253 bags shipped during the same period last year. (Each bag is 1.5 cubic feet weighing 45 lbs.)

In October, zero 1-cubic foot bags of LeafGro™ were sold. This compares with 30 bags during the same period last year.

In October, 3,150 bags of Compro™ bags were shipped to distributors. This compares with 3,700 bags during the same period last year.

OUT-OF-COUNTY HAUL

Brunswick County, Virginia – Approximately 15,300 tons of ash residue and 2,326 tons of nonprocessable waste were transported to the County's dedicated disposal cell at the Brunswick Waste Management Facility, Inc., Landfill in Brunswick County, Virginia.

Perry Hall Maryland – Approximately 3,423 tons of asphalt, soil, concrete, and brick and block were sent to the Honeygo Run Recycling site in Perry Hall, Maryland, for construction and demolition recycling in the month of October.

GENERAL INFORMATION

Important Telephone Numbers

General information on solid waste	240-777-6400
Customer Service	240-777-6410
Transfer Station	240-777-6560 (County Office) 301-916-3031 (Covanta) 301-330-2840 (MES)
Materials Recovery Facility	240-777-6591 (County Office) 301-417-1433 (MES)
Resource Recovery Facility	240-777-6494 (County Office) 301-916-3031 (Covanta)
Yard Trim Compost Facility	301-428-8185 (MES)
Internet for DSWS	www.montgomerycountymd.gov/solidwaste www.montgomerycountymd.gov/recycling www.montgomerycountymd.gov/hazardouswaste www.montgomerycountymd.gov/useitagain www.montgomerycountymd.gov/yardtrim www.montgomerycountymd.gov/veggieoil www.montgomerycountymd.gov/GOGREEN

Note: All comments, questions, and suggestions on the contents of this report should be addressed to:

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SOLID WASTE FACTS IN A NUTSHELL

TOPIC OR FACILITY	
Latest Tonnage of Materials Recycled in a Fiscal Year in Montgomery County	553,501 (FY08)
Latest Recycling Rate Reported in Montgomery County	44.3% (FY08)
Recycling Goal	50% by December 2010
Resource Recovery Facility (RRF)	Permitted Capacity = 657,000 tons per calendar year (based on 5,500 BTU/lb waste)
Yard Trim Compost Facility	<p>Under the Sugarloaf Settlement Agreement, operations are limited to the receipt of 77,000 tons per fiscal year.</p> <p>In FY09, 67,928 tons of yard trim were received at the Dickerson Facility.</p>
# Residences receiving trash collection by County contractors	90,886
# Residences receiving collection of recyclables in blue bins and yard trim collection	210,318
Term of out-of-county waste transportation and disposal contract with Brunswick Waste Management Facility, Inc.	June 19, 1997 through June 30, 2012 with an option for a five-year renewal. (Service started October 20, 1997.)

GLOSSARY OF ACRONYMS

BTU	British Thermal Unit
CEMS	Continuous Emissions Monitoring System
DAFIG	Dickerson Area Facilities Implementation Group
DEP	Department of Environmental Protection
DSWS	Division of Solid Waste Services
EPA	United States Environmental Protection Agency
ERP	Enterprise Resource Planning
FY	Fiscal Year
HHW	Household Hazardous Waste
HOC	Housing Opportunities Commission
MCPS	Montgomery County Public Schools
MDE	Maryland Department of Environment
MES	Maryland Environmental Services
M-NCPPC	Maryland-National Capital Park and Planning Commission
MRF	Materials Recovery Facility
NMWDA	Northeast Maryland Waste Disposal Authority
NOV	Notice of Violation
OSHA	Occupational Safety & Health Administration
PJM	Pennsylvania-New-Jersey-Maryland
RRF	Resource Recovery Facility
RTD	Resistive Temperature Detector
SCFM	Standard cubic feet per minute
SCS	SCS Engineers, Inc.
SORRT	Smart Organizations Reduce and Recycle Tons
SNCR	Selective Non-Catalytic-Reduction
SWAC	Solid Waste Advisory Committee
SVO	Straight Vegetable Oil
TRRAC	Think Reduce and Recycle at Apartments and Condominiums
WVO	Waste Vegetable Oil

